WHAT IS CLAIMED IS:

- 1. A compound that inhibits PTP-1B and that interacts with at least one of the PTP-1B exosite-forming residues.
- 2. A compound that inhibits TC-PTP and that interacts with at least one of the TC-PTP exosite-forming residues.
- 3. A compound having the structure having the structure

$$R^2$$
 R^6 R^1 R^1 R^1 R^2 R^3

wherein:

R¹ is hydrogen, methyl, ethyl, or propyl;

 $R^2 \text{ is hydrogen, } -S(O_2)R^3, -NH(C(=O)R^3, -NH(C(=O)CH_2(C=O)OR^3, \\ -S(O_2)NR^4R^5, \text{ or } -NR^4S(O_2)R^3 \text{ where } R^3 \text{ is } C_1-C_5 \text{ alkyl, } R^4 \text{ is hydrogen, } C_1-C_5 \text{ alkyl, } \\ \text{unsubstituted cyclic moiety, or substituted cyclic moiety, and } R^5 \text{ is either hydrogen or } R^5 \\ \text{and } R^4 \text{ together form an unsubstituted cyclic moiety or a substituted cyclic moiety;}$

 R^6 is hydrogen or alternatively when R^2 is $-NR^4S(O_2)NR^3$, then R^6 and R^4 together form an unsubstituted cyclic moiety or substituted cyclic moiety; and, L is $-NHS(O_2)$ - or $-S(O_2)$ NR^7CH_2 - where R^7 is hydrogen or C_1 - C_5 alkyl.

4. The compound of claim 3 wherein the one or more substituents on the substituted cyclo group are each independently selected from the group consisting of: C₁-C₅ alkyl, phenyl, benzyl, F, Cl, I, Br, -OH; -NO₂; -CN; -CF₃; -CH₂CF₃; -CH₂Cl; -CH₂OH; -CH₂CH₂OH; -CH₂NH₂; -CH₂SO₂CH₃; -OR⁸; -C(O)R⁸; -COOR⁸; -C(O)NR⁸R⁹;

 $-OC(O)R^8$; $-OCOOR^8$; $-OC(O)NR^8R^9$; $-NR^8R^9$; $-S(O)_2R^8$; and $-NR^8C(O)R^9$ where R^8 and R^9 are each independently hydrogen, C_1-C_5 alkyl, phenyl or benzyl.

- 5. The compound of claim 3 wherein R^2 and R^6 are both hydrogen.
- 6. The compound of claim 3 wherein R² is -S(O₂)NHR⁵ where R⁵ is an unsubstituted cyclic moiety or substituted cyclic moiety, and R⁶ is hydrogen.
- 7. The compound of claim 3 wherein R^2 is $-S(O_2)R^3$ where R^3 is methyl, ethyl, or propyl, and R^6 is hydrogen.
- 8. The compound of claim 3 wherein R^2 is -NH(C(=O) R^3 where R^3 is methyl, ethyl, or propyl, and R^6 is hydrogen.
- 9. The compound of claim 3 wherein R^2 is -NH(C(=O)CH₂(C=O)OR³ where R^3 is methyl, ethyl, or propyl, and R^6 is hydrogen.
- 10. The compound of claim 3 wherein R^2 is $-NR^4S(O_2)R^3$ wherein R^3 is methyl and R^4 and R^6 together form an unsubstituted heterocyclo or a substituted heterocyclo.
- 11. A compound having the structure

wherein:

 R^{10} is C_1 - C_5 alkyl or NHR¹¹ where R^{11} is hydrogen, C_1 - C_{10} alkyl or aryl; and, L is -NHS(O₂) - or -S(O₂) N(CH₂)₃CH₂-.

- 12. The compound of claim 11 wherein R¹⁰ is methyl, ethyl or propyl.
- 13. The compound of claim 11 wherein R¹⁰ is NHR¹¹ and R¹¹ is hydrogen.
- 14. The compound of claim 11 wherein R¹⁰ is NHR¹¹ and R¹¹ is aryl.
- 15. The compound of claim 19 wherein R¹¹ is phenyl.
- 16. The compound of claim 19 wherein R¹¹ is heteroaryle
- 17. An exosite mutant of PTP-1B.
- 18. An exosite mutant of TC-PTP.
- 19. A pharmaceutical composition comprising an effective amount of a compound of any one of claims 1-3, and 11, or a prodrug or pharmaceutically acceptable derivative thereof, in admixture with a pharmaceutically acceptable carrier.
- 20. A method of identifying an exosite inhibitor of PTP-1B comprising
 - a) contacting a test compound with PTP-1B;
 - b) contacting the test compound with an exosite mutant of PTP-1B; and
 - c) comparing the activity of PTP-1B in the presence of the test compound with the activity of the exosite mutant of PTP-1B in the presence of the test compound.
- 21. A method of identifying an exosite inhibitor of TC-PTP comprising
 - a) contacting a test compound with TC-PTP;
 - b) contacting the test compound with an exosite mutant of TC-PTP; and
 - c) comparing the activity of TC-PTP in the presence of the test compound with the activity of the exosite mutant of TC-PTP in the presence of the test compound.

- 22. A method for treating type 2 diabetes, or a pathologic condition associated with type 2 diabetes, comprising administering to a subject in need thereof a therapeutically effective amount of a PTP-1B exosite inhibitor of claim 1.
- 23. The method of claim 22 wherein the pathologic condition associated with type 2 diabetes is insulin resistance.
- 24. A method for treating inflammation is provided comprising administering to a subject in need thereof a therapeutically effective amount of a TC-PTP exosite inhibitor of claim 2.
- 25. A method for treating an immune system disorder comprising administering to a subject in need thereof a therapeutically effective amount of a TC-PTP exosite inhibitor of claim 2.
- 26. A method for treating a hematopoiesis disorder comprising administering to a subject in need thereof a therapeutically effective amount of a TC-PTP exosite inhibitor of claim 2.